

Claims

1. A method of relocating the header compression context in a packet network which transmits packets having compressed headers comprising:

5 establishing a connection between a mobile terminal and a first network entity including storing context information used with compression and decompression of the headers of the packets at the mobile terminal and the first network entity;

10 stopping the context information updating in the mobile terminal and in the first network entity;

 taking a snapshot of the compression and decompression context information in the first network entity including storing said context information snapshot in the first network entity; and

15 changing the connection between the first network entity and the mobile terminal to a connection between the mobile terminal and a second network entity including transferring the context information snapshot stored by the first network entity to the second network entity which is stored by the second network entity as the context information of the second network entity and using the stored context information at the mobile terminal and the second
20 network entity for compression and decompression of the headers of the packets.

 2. A method in accordance with claim 1 wherein:

25 said context information updating is stopped by disabling the mobile terminal and the first network entity decompressors from sending acknowledgements to the compressor of the opposite side.

 3. A method in accordance with claim 1 wherein:

 said context information updating is stopped by stopping the mobile terminal to compress and transmit uplink data and stopping the first network entity to compress and transmit downlink data.

30 4. A method in accordance with claim 3 wherein:

 said taking a snapshot of the compression and decompression context information in the first network entity is delayed until said transmitted uplink data and downlink data has been received and decompressed.

 5. A method in accordance with claim 1 wherein:

said context information updating is stopped by discarding in the first network entity compression/decompression acknowledgements from the mobile terminal.

6. A method in accordance with claim 1 wherein:

5 said context information updating is stopped by disabling in the first network entity to send compression/decompression acknowledgements to the mobile terminal.

7. A method in accordance with claim 5 wherein:

10 sending a context update request from the first network entity to the second network entity, in response to a detection of a context update request sent by the mobile terminal in the first network entity; and

 sending the first packet from the second network entity to the mobile terminal as a packet containing said context update request.

8. A method in accordance with claim 5 wherein:

15 sending a context update request from the first network entity to the second network entity, in response to a detection of out-of-synchronism of the context information in the first network entity; and

 sending the first packet from the second network entity to the mobile terminal as a packet containing said context update request.

20 9. A method in accordance with claim 1 wherein:

 transferring the context information snapshot stored by the first network entity to the second network entity before changing the connection between the first network entity and the mobile terminal to a connection between the mobile terminal and a second network entity.

25 10. A method in accordance with claim 1 wherein:

 said method is used in accordance with Robust Header Compression (ROHC) implemented in a UMTS system.

11. A method in accordance with claim 10 wherein:

30 performing said relocation at least partly concurrently with serving radio network subsystem (SRNS) relocation.

12. A packet network in which packets having compressed headers are transmitted between a mobile terminal and network entities comprising:

 a connection is arranged to established between a mobile terminal and a first network entity;

context information used with compression and decompression of the headers of the packets is arranged to be stored at the mobile terminal and the first network entity;

5 the context information updating in the mobile terminal and in the first network entity is arranged to be stopped;

a snapshot of the compression and decompression context information is arranged to be taken at and stored in the first network entity;

10 the connection between the first network entity and the mobile terminal is arranged to be changed to a connection between the mobile terminal and a second network entity, whereby the context information snapshot stored by the first network entity is arranged to be transmitted to and stored in the second network entity as the context information of the second network entity; and

15 the stored context information at the mobile terminal and the second network entity is arranged to be used for compression and decompression of the headers of the packets.

13. A packet network in accordance with claim 12 wherein:

20 said context information updating is arranged to be stopped by disabling the mobile terminal and the first network entity decompressors from sending acknowledgements to the compressor of the opposite side.

14. A packet network in accordance with claim 12 wherein:

25 said context information updating is arranged to be stopped by stopping the mobile terminal to compress and transmit uplink data and stopping the first network entity to compress and transmit downlink data.

15. A packet network in accordance with claim 14 wherein:

30 said taking a snapshot of the compression and decompression context information in the first network entity is arranged to be delayed until said transmitted uplink data and downlink data has been received and decompressed.

16. A packet network in accordance with claim 12 wherein:

35 said context information updating is arranged to be stopped by discarding in the first network entity compression/decompression acknowledgements from the mobile terminal.

17. A packet network in accordance with claim 12 wherein:

said context information updating is arranged to be stopped by disabling in the first network entity to send compression/decompression acknowledgements to the mobile terminal.

18. A packet network in accordance with claim 16 wherein:

5 a context update request is arranged to be sent from the first network entity to the second network entity, in response to a detection of a context update request sent by the mobile terminal in the first network entity; and

10 the first packet is arranged to be sent from the second network entity to the mobile terminal as a packet containing said context update request.

19. A packet network in accordance with claim 16 wherein:

15 a context update is arranged to be sent request from the first network entity to the second network entity, in response to a detection of out-of-synchronism of the context information in the first network entity; and

the first packet is arranged to be sent from the second network entity to the mobile terminal as a packet containing said context update request.

20. A packet network in accordance with claim 12 wherein:

20 the context information snapshot stored by the first network entity is arranged to be transferred to the second network entity before changing the connection between the first network entity and the mobile terminal to a connection between the mobile terminal and a second network entity.

21. A packet network in accordance with claim 12 wherein:

25 said packet network is a UMTS system, wherein Robust Header Compression (ROHC) is implemented.